

STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD

IN RE: ALTERNATE ENERGY PURCHASE PROGRAM	DOCKET NOS. AEP-2017-_____ (TF-2017- _____)
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**REQUEST FOR APPROVAL OF
PROGRAM PLAN AND RELATED TARIFF PAGES**

COMES NOW Interstate Power and Light Company (IPL) seeking approval for Beyond Solar, its alternate energy purchase program plan, and for related tariff pages to implement the plan and states:

1. IPL submits the attached plan for Beyond Solar, a new alternative energy purchase program.
2. IPL also submits for Board approval the tariff pages necessary to implement this program on the effective date, November 1, 2017.
3. IPL's program builds on the Second Nature program already in place. IPL has already secured renewable resources to increase renewable generation in accordance with the customer contributions to this program for this purpose.

WHEREFORE, IPL requests the Board approve its alternate energy purchase program.

Dated this 28th day of June, 2017.

Respectfully submitted,

Interstate Power and Light Company

By: /s/ Samantha C. Norris
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Interstate Power & Light Company Beyond Solar Renewable Energy Program For Iowa Customers

Overview

In 2001, Interstate Power and Light Company (IPL) launched its first renewable energy program, Second Nature, to residential customers in Iowa, and in 2004, this program became available to non-residential customers. IPL proposes to modify its Alternative Energy Purchase (AEP) green pricing program to include an additional program, Beyond Solar Renewable Energy Program (Beyond Solar), for all customer classes in Iowa, pending Iowa Utilities Board (Board) approval. The anticipated effective date of Beyond Solar is November 1, 2017.

Beyond Solar provides IPL customers the opportunity to support electricity generated by locally-sourced solar and wind facilities in Iowa. This program allows customers who may not be able to install rooftop solar or site a wind turbine on their property to support clean energy.

The goal of this program is to create a new option for customers to increase the amount of clean, renewable energy produced in Iowa. Up to 750 kilowatts (kW) from a wind farm in Hancock County, Iowa, and up to 1,000 kW from an IPL-owned solar facility in Dubuque, Iowa, are currently available for the program.

Availability

Pending approval by the Board, Beyond Solar will be available to all IPL Iowa electric customers beginning November 1, 2017. The eligible customer classes include residential, commercial, and industrial. Customers may only choose one green pricing option, either the existing Second Nature program or the newly proposed Beyond Solar program.

Customers can enroll in Beyond Solar by calling 1-800-972-5325 or by enrolling online at aliantenergy.com/beyond. All changes become effective on the next practicable billing date.

Sources and Cost of Renewable Energy

Beyond Solar's renewable energy is electricity generated by solar and wind facilities in Iowa. This renewable energy is purchased or owned by IPL, and the costs are then offset by revenues received, based on the participation of Beyond Solar customers.

Beyond Solar has enough renewable energy to meet the anticipated demand for program participants in Iowa as noted in subrule 15.17(1). Beyond Solar's current sources of renewable energy are as follows:

Hancock County Wind Farm, Iowa

- **Fuel type:** Wind
- **Nameplate capacity:** Base Portion 56.76 MW – Beyond Solar up to 750 kW
- **Estimated annual kWh output:** Base portion 149,829,657 kWh – Beyond Solar up to 1,979,779 kWh
 - Based on average of 2015 and 2016 annual production

- **Estimated in-service date:** 12/31/2002
- **Ownership, including any utility affiliation:** FPL Energy Hancock County Wind, LLC
 - **Contracting utility :** Interstate Power and Light Company (IPL)
 - **Contract terms:** Twenty-five years from commercial operation
 - **Contract date:** September 27, 2002
 - **Contracted Amount:** 56.76 MW
- **Copy of any contract for utility purchases from the facility:** provided
- **A description of the method or procedure used to select the facility:** Originally selected through an RFP, this site has long-term potential for producing wind at low-cost to program participants.
- **Facility location:** Hancock County, IA
- **Compliance with 15.17(1)c:** Located in Iowa

Dubuque Solar – Graf Farm Site

- **Fuel type:** Solar
- **Nameplate capacity:** 5 MW (base portion), up to 1,000 kW (Beyond Solar)
- **Estimated annual kWh output:** Base portion 6,596,000 kWh, up to Beyond Solar 1,319,200 kWh
- **Estimated in-service date:** 9/1/2017
- **Ownership, including any utility affiliation:** Owned and operated by IPL
- **Copy of any contract for utility purchases from the facility:** Utility owned
- **A description of the method or procedure used to select the facility:** The site is in a visible location in an area where there is community support for a large solar project.
- **Facility location:** Dubuque, IA
- **Compliance with 15.17(1)c:** Located in Iowa

The average cost of the renewable energy from these sources over the contract terms is \$23.80 per megawatt-hour (MWH) for wind, and \$128.80 per MWH for solar. Please see Confidential Exhibits A and B for the calculation of the cost of energy.

IPL will acquire additional renewable energy for Beyond Solar as needed in the future, based on actual and projected customer demand. IPL will review program resources after a total of 1,000 1-kW blocks have been reserved.

Pricing

Customers make fixed contributions and may select one of three support levels, measured in 1-kW block increments, in the Beyond Solar facilities. Customers can choose to support solar energy at participation levels of 25 percent, 50 percent, or 100 percent. Beyond Solar pricing will consist of a monthly charge based on the cost of the renewable energy sources in the program as well as administrative costs and a monthly credit for the avoided cost of energy plus a capacity credit, related to the output of the renewable energy sources. The monthly charge and credit may be recalculated annually or on an as-needed basis, such as for changes to the renewable energy sources utilized as Beyond Solar facilities.

Solar/Wind Support Level	Monthly Charge per 1 kW Block	Monthly Credit per 1 kW Block
100% Solar / 0% Wind	\$17.24	(\$3.64)
50% Solar / 50% Wind	\$11.47	(\$4.77)
25% Solar/ 75% Wind	\$ 8.58	(\$5.34)

Please see Exhibit C for the calculation of monthly charge and credit for the three support levels.

Energy Cost Adjustment

IPL will credit the net of the Beyond Solar monthly charge and monthly credit, billed to participating customers, through the Energy Cost Adjustment (ECA). This net credit amount will be included as a separate line item along with the other ECA revenue collections in the monthly Over/Under Collections for Energy Cost and AEP Factors worksheet in the monthly ECA filing. Since recovery of the Dubuque Solar asset is included in base rates for all customers, the net credit of the Beyond Solar monthly charges included in the ECA, will offset the proportionate charge in base rates for non-participating customers.

Accounting

Tracking the Beyond Solar Monthly Charges and Credits

A separate project number is assigned to track the Beyond Solar program monthly charges and monthly credits in the general ledger in order to calculate the amount to credit back to all customers in the monthly ECA. A separate report will provide the accounting for monthly charges and monthly credits by participation level in order to monitor customer preferences and participation in the Beyond Solar pilot program

Accounting for Power Purchases and Solar Generation

Based upon customer participation levels, up to 750 kW of the power purchased by IPL from the Hancock County wind farm and up to 1,000 kW of the output of the Dubuque solar facility can be used for the Beyond Solar program.

IPL will calculate the monthly output and costs for the Beyond Solar participation in these renewable energy sources, in order to determine the actual charges for a 1 kW block in the facilities. These actual costs may be used to recalculate the monthly kW block charges annually or on an as-needed basis.

In the event that sufficient resources are not in place to meet current and projected demand, IPL will acquire additional renewable energy. If the time required to bring additional resources online exceeds 90 days, IPL will suspend new customer contributions and create a waiting list for the program.

Accounting for Marketing & Administrative (Non-Power) Program Costs

Separate project numbers have been assigned to the Beyond Solar program. All non-power costs are tracked and assigned to these project numbers to ensure that no cross-subsidization occurs.

Marketing

Effective marketing will be important to the success of the Beyond Solar program. Our marketing campaign will focus on education, on targeting environmentally concerned customers and on being efficient with energy resources.

Please refer to Exhibit D for a marketing plan and schedule as well as a sample of the informational brochure.

Customer Notification

IPL will notify all electric customers of the program availability through a proposed bill message and corresponding web page on alliantenergy.com. The bill message and web page will be included in eligible customer's bills starting in late July, 2017. Please see Exhibit E for samples of the bill message and web page.

Learning from Experience and Monitoring Progress

Beyond Solar will be monitored to determine its success. Data that will be monitored will include: participants by customer class and number of 1 kW blocks subscribed by participant and customer class as well as level of support for the generation types, and number of participants specifically in the City of Dubuque, Dubuque County and Hancock County. IPL will also monitor how many subscribers also participate in energy efficiency programs within one year of subscribing to Beyond Solar. Further, IPL will attempt to determine the effectiveness of various marketing methods. This data will be available to the Board as requested.

Public notice of additional confidential documents included in this filing

Exhibit A: Power Purchase Agreement and Invoices (80 pages)

Exhibit B: Levelized Cost Analysis (Excel)



Introducing ***Beyond Solar***

Enjoy pure Iowa solar and wind
by signing up for Alliant Energy's
Beyond Solar.

It's simple, smart and more.

First come, first served



Beyond Solar has limited availability.

Sign up now at
alliantenergy.com/beyondsolar
or call 1-800-972-5325.



RESERVE YOUR SPOT FOR

BeyondSolar






Select your level of solar:

- ☐ **100% solar** (approx. \$XX/month per block)*
- ☐ **50% solar / 50% wind** (approx. \$X/month per block)*
- ☐ **25% solar / 75% wind** (approx. \$X/month per block)*



Smart energy use

The *Beyond Solar* experience includes using energy wisely. We offer many options to help you be a smart energy user.**

-  **Join an online community** and track your energy use compared to similar homes.
-  **Receive cash back** when you upgrade to a smart learning thermostat.
-  **Earn rewards** by cycling your air conditioner during the summer months.
-  Recycle your old working appliance. We'll do the heavy lifting **and give you cash back**.
-  Scheduled a tune up for your air conditioner for **premium efficiency and savings**.



Make an impact

Go beyond supporting renewables and make an impact for future generations. When you reserve your *Beyond Solar* block, we will plant a tree in your name.

Get started

It's simple – get renewable energy without the worry of installation, maintenance and upfront costs.

Sign up now at alliantenergy.com/beyond or 1-800-972-5325.

**Beyond Solar* will be in addition to a customer's monthly bill and is comprised of a charge and a credit.

**Some qualifications may apply.

Beyond Solar

Marketing plan
June 2017

Overview

- Value proposition
 - Get local renewable energy without the worry of installation, maintenance and upfront costs.
- Goal
 - 1,000 blocks reserved during the first program year.

Marketing approach



- Multichannel approach
 - Targeted: Email, direct mail, digital advertising
 - Broad: Earned media, customer newsletter
- Two phases
 - Block reservation phase
 - Participation phase

Key messages

- Beyond Solar is a simple way to support local solar and wind energy (Dubuque solar and Hancock County wind).
- Customers can choose a participation level that best fits their lifestyle.
- Combining energy efficiency with renewable energy has the most positive impact on the environment.

Target audience

- 55+ primary (45+ secondary)
- Higher income \$75,000+
- Customers that have received an energy efficiency rebate in the last 12 months
- Customers that have received an electric vehicle charging rebate from us in the last 12 months



Marketing

Exhibit D
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Deliverable	Timing
Earned media	June 2017
Regulatory bill message	July 2017*
Regulatory bill insert**	August 2017**
Community event	September 2017
Customer newsletter	November 2017 & April 2018
Tree planting	Spring 2018
Welcome materials	Ongoing
Direct mail	Ongoing
Email	Ongoing
Advertising	Ongoing

*Pending IUB approval timing.

**If the bill message isn't approved.

Bill message

You have a new choice when it comes to supporting solar and wind energy, with our new program Beyond Solar. Reserve your blocks of renewable energy today and learn more at alliantenergy.com/beyondsolar.

alliantenergy.com/beyondsolar

Beyond Solar

Background

Beyond Solar is a unique solution for Iowa customers to become actively involved in their role with energy. This new option combines Iowa solar and wind with tools and incentives for smart energy use. You can reserve one or more blocks of renewable energy with no upfront costs. Solar power will come from the [state's largest solar garden](#), which is currently under construction in Dubuque. The product also includes wind energy from the Hancock County Wind Farm in Iowa. Additional renewable resources in our Iowa communities could be added as *Beyond Solar* expands.

Cost and participation

You can reserve one or more blocks of renewable energy with no upfront costs. One kilowatt block represents roughly 20% of a typical residential customer's monthly usage. You can choose your preferred level of solar.

- Reserve a 100% solar block for \$13.61 a month
- Reserve a 50% solar / 50% wind block for \$6.70 a month
- Reserve a 25% solar / 75% wind block for \$3.24 a month

Beyond Solar will be in addition to a customer's monthly bill and consists of two parts: a charge and a credit.

Charge – The charge will be for the renewable energy block(s) and covers the cost to build and operate solar and purchase wind energy.

Credit – The credit will represent the cost savings by not using traditional fuels to generate electricity.

Typical residential customer usage (730 kWh/monthly) example

Charge for one block of 100% solar = approximately \$17.24

Credit = approximately \$3.64

Total *Beyond Solar* monthly charge = approximately \$13.61

Typical (non-residential) general service customer usage (2,220 kWh/monthly) example

Charge for three blocks of 50% solar/50% wind = approximately \$34.41

Credit = approximately \$14.31

Total *Beyond Solar* monthly charge = approximately \$20.10

When comparing equal amounts of solar and wind in Iowa, wind produces more electricity than solar, making it more cost-effective. This is why the higher ratio of wind in a *Beyond Solar* block costs less.

Participation in *Beyond Solar* is on a first-come, first-served basis. We encourage you to reserve their block(s) now by sending the following information to beyondsolar@alliantenergy.com or calling 1-800-972-5325:

- Name
- Address
- Phone number

- Number of renewable energy block(s) and solar level (ex., two blocks of 100% solar)

Smart energy use

We believe in the importance of combining renewables with energy conservation. By choosing LED lighting, installing a learning thermostat or tuning up an air conditioner, you can save energy and money. With smart energy use, you need fewer *Beyond Solar* blocks to achieve your renewable energy goals.

We offer many options to help you be a smart energy user.

- Join an online community and track your energy use compared to similar homes.
- Receive a rebate when you upgrade to a [learning thermostat](#).
- Earn rewards by [cycling your air conditioner](#) during the summer months.
- [Recycle your old working appliance](#). We'll do the heavy lifting and give you cash back.
- [Schedule a tune up](#) of your air conditioner for premium efficiency and savings.

We recommend you take advantage of energy efficiency rebates by visiting alliantenergy.com/rebates.

Additional offerings

We will plant a tree on behalf of each customer who participates in *Beyond Solar*. Once the product is approved by the Iowa Utility Board participants will receive a welcome packet and a window cling to show their support for renewable energy and *Beyond Solar*. Tree planting information will also be shared at that time.

Difference between *Beyond Solar* and *Second Nature*

Beyond Solar has a higher percentage of solar than *Second Nature*. If you are enrolled in *Second Nature* you would need to choose which product, *Second Nature* or *Beyond Solar*, you'd like to support. Customers aren't able to participate in both.

Timing

Beyond Solar is subject to review by the Iowa Utilities Board (IUB). Customers will be contacted by Alliant Energy to verify their participation once the regulatory process is complete. The proposed effective date of this product is November 1, 2017.

Qualifications

- You must be an Iowa electric customer.
- Your account can't be more than 30 days past due.
- Customers may participate in only one green pricing product. If you are enrolled in *Second Nature*, you will need to choose which product you'd like to support.

More information

Interested in the renewable energy mix? Refer to Alliant Energy's Iowa utility fuel mix. To enroll or ask questions, please contact our Renewable Hotline at 1-800-972-5325 or email beyondsolar@alliantenergy.com.

BILL INSERT

Beyond Solar is a unique solution for Iowa customers to become actively involved in their role with energy. This new option combines Iowa solar and wind with tools and incentives for smart energy use. Solar power will come from the state's largest solar garden, which is currently under construction in Dubuque. *Beyond Solar* also includes wind energy from the Hancock County Wind Farm in Iowa. Additional renewable resources in our Iowa communities could be added as *Beyond Solar* expands.

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- Name
- Address
- Phone number
- Number of renewable energy block(s) and solar level (ex., two blocks of 100% solar)

Qualifications

- You must be an Iowa electric customer (residential, non-residential or commercial).
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You can take advantage of energy efficiency rebates and start saving by visiting alliantenergy.com/rebates.

Timing

Beyond Solar subject to review by the Iowa Utilities Board. Customers will be contacted by Alliant Energy to verify their participation once the regulatory process is complete. The proposed effective date of this program is November 1, 2017.

Air emission rates for Alliant Energy's Iowa utility electricity generation

Fuel type	Power generated	Pounds of emission per 1,000 kWh generated		
		SO ₂	NO _x	CO ₂
Owned generation	51.44%			
Coal	36.63%	3.77	1.82	2,444
Natural gas	10.96%	0.01	0.31	931
Wind	3.82%	N/A		
Oil	0.03%	0.32	3.63	2,463
Owned generation	48.56%			
Wind	4.43%	N/A		
Hydro	0.12%			
Biomass	0.02%			
<i>Second Nature</i> – wind (AEP)	0.18%			
<i>Beyond Solar</i> – wind (AEP)	TBD			
<i>Beyond Solar</i> – solar (AEP)	TBD			
Nuclear	21.88%			
Other	21.93%	2.94	1.61	1,425

More information

For program updates or questions, call our Renewable Hotline at 1-800-972-5325, visit alliantenergy.com/beyondsolar or email beyondsolar@alliantenergy.com.

Interstate Power and Light Company

June 28, 2017

Initial Filing

Interpretation No. IPL E2017-15

RE: TARIFF ADMINISTRATION

General Information

Interstate Power and Light Company (IPL) is proposing to implement the Beyond Solar Renewable Energy Program (Beyond Solar) to allow customers to voluntarily participate in a program which supports solar and wind generation produced in Iowa. The program provides a monthly charge and monthly credit related to the output of the solar and wind resources. The tariff is structured to allow customer participation at support levels of 25 percent solar/75 percent wind, 50 percent solar/50 percent wind, and 100 percent solar.

Confidential Exhibit A, Confidential Exhibit B and Exhibit C are attached and include the costing models and support for both Hancock Wind and the Dubuque solar resources, as well as the calculation of the monthly charge and monthly credit for each customer support level.

Red-lined tariff sheets are also provided.

Tariff Changes:

(IPL Original Electric Tariff No. 1)

Replace:

Substitute Sixth Revised Sheet No. 2
Twenty-Second Revised Sheet No. 21

Ninth Revised Sheet No. 23
Fifth Revised Sheet No. 28
Fourth Revised Sheet No. 30
Third Revised Sheet No. 38
Second Revised Sheet No. 82

With:

Substitute Seventh Revised Sheet No. 2
Substitute Twenty-Third Revised Sheet
No. 21

Substitute Tenth Revised Sheet No. 23
Substitute Sixth Revised Sheet No. 28
Substitute Fifth Revised Sheet No. 30
Substitute Fourth Revised Sheet No. 38
Substitute Third Revised Sheet No. 82

Insert:

Original Sheet No. 91

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